Digital transformation: are you ready for exponential change?

By Futurist Gerd Leonhard
What do these pictures tell you?
Industry 4.0 Maturity Index

Source: Infosys White Paper
SLIDO Setup Instructions

• Enter the event code COAA19 and select COAA Best Practices Conference
  • Select CPC-7: Innovation at Suncor

• In the app you can,
  - choose to ask questions
  - participate in poll questions that I will pose
In one or two words tell us what **Digital Transformation** means to you?
Partnering with the business to unleash the full potential of our people

**GOALS**

- Energize Our People
- Maximize the Value of Our Assets
- Grow Our Business
- Enhance User Experience
- Digital Enablers

**PRIORITIES**

- Future of Work — Work, Worker and Workplace
- Digital Mine
- Digitally Optimized Assets
- Value Chain Optimization
- Digital Project
- Next Generation In Situ Replication
- Customer-Centric Experience
- SAP S4, Security, Analytics, Mobility, Digital Functions
Suncor organization for Digital Project Transformation

Projects Organization

Digital & Enterprise Technical

Architecture
Data Analytics
Strategy & Planning
Innovation
Suncor Digital Project

Our Vision

Leverage digital technologies in projects to enable top quartile capital efficiency

Flight Paths

- Integrated Project Data
- Project Integration Across Enterprise
- Connected Project teams
- Analytics in Execution
- Digital Ecosystem
Suncor Digital Projects Framework

- **Technology Literacy & Maturity**
  - Standard ‘out of box’ solutions

- **Value Driven**
  - Enabler
  - Data Sharing & Accessibility

- **Innovation**
  - Innovation Engine
  - One stop shop

- **PEOPLE & PROCESS**

- **TECHNOLOGY & DATA**

- **INNOVATION & GOVERNANCE**

- **DELIVERY MODEL**

Pilot Projects
- Architecture, organization wide reach
Ideation to Roadmap

IDEATE — PRIORITIZE — DEFINE — ROADMAP

GREEN-HOUSE SESSION
DEFINE FLIGHT PATHS

PAIN POINTS/
OPPORTUNITIES

EVALUATION
CRITERIA

SUNCOR
Pain Points / Opportunities identified during the workshops

- **Sharing information with contractors is not easy**
- **Difficult to access historical project information**
- **Measuring progress in the field is cumbersome and inaccurate**
- **Communication and seamless data sharing**
- **Operating/Reliability data fed into future project designs**
- **Lifecycle impacts when making project decisions**
- **Planning the work is challenging with manual tools**

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Themes of interest

- Easy to use tools for frontline construction
- Laser scan (Virtual fit) for brownfield and turnaround projects
- Fact based decision making; understand leading & lagging indicators

- Collaboration Tools
- Work Packaging
- Materials Tracking & Traceability
- Construction Simulation
- Const. input into Design
- Progress and Perf Mgmt
SLIDO: POLL QUESTION

• From your point of view which of the following is the biggest Digitalization opportunity for our Industry?

  – Data Standardization & Analytics
  – Digital Twin
  – Augmented Reality/Virtual Reality
  – Laser Scanning & Drones
  – Autonomous vehicles & equipment
Examples of digital project initiatives

1. Project Performance Data Visualization

2. Safety & Productivity Solution (SPS)

3. Drones for Survey and Progress Measurement

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# Things not to forget…!

1. **Have a Solid Business Case**
2. **Challenges with sharing data seamlessly**
3. **People, Process, Technology & Data are critical**
4. **Standardization & Replication have significant benefits**
5. **Pros & cons around staying system agnostic**
6. **Problems/Opportunities not to be considered in isolation**
Projects Innovation Engine: this is a journey…

**What is it?**
Framework to allow ideas from the organization to be submitted, reviewed and systematically integrated into the Projects technology roadmap.

**Why do we need it?**
To foster a culture of innovation within Project teams, and ensure a structured process in place to assess and implement new technology opportunities.

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*It doesn’t make sense to hire smart people and tell them what to do; we hire smart people so they can tell us what to do.*

— Steve Jobs
Digital Ecosystem

- Data Integration is foundational to Digitalization
How is Suncor engaging?

**CONTRACTOR COMMUNITY**
- Sourced Input /Engagement
- Ecosystem Readiness
- Technology use in Industry

**PEERS**
- Operators Digital Forum
- Suncor to host next session

**TECH PROVIDERS & CONSULTANTS**
- Art of possible
- Data, Analytics & AI
- IPA, Technology Summits & Conferences
What we need in our Industry?

- Constructive Engagement
- Learn from other Industries
- Collaborate within Industry
- Standardized Data Structure
- Digital Efforts towards AWP Adoption
WORKSHOP
Activity @ your table

We have assigned persona’s to each of your tables based on your table number...

Tables 1, 4, 7 – Construction Contractor
Tables 2, 5, 8 – Suppliers, Technology providers, Consultants
Tables 3, 6, 9 – Owner / Operator
Tables 10, 11 – EP & EPCs

There are 3 tasks to this activity

Pick a scribe & speaker at your table
TASK 1 - IDEATE

What

• To enable Digital Transformation in our industry,
  – how do you (as the persona) engage with others?
  – what is your expectation from other personas’?

Brainstorm ideas:

  - actions undertaken in the last 6-12 months
  - partnership opportunities on your digital journey
  - Digital Trends you see in the industry
  - Digital for AWP

Use flipcharts at your respective tables to scribe as many ideas as you can.

Duration: 15 mins.
TASK 2 - PRIORITIZE

Prioritize an idea:

In discussion with others at your table figure out which one of the ideas at your table is the most impactful.

- one idea for your persona
- one idea for ‘others’ persona

**Duration:** 5 mins
TASK 3 – CRYSTALLIZE

Expand on your chosen ideas to,

- Showcase benefits of this idea
- Risks, challenges & constraints
- Suggest timeline to implement

Use the 11 x 17 sheet provided at your table to scribe.

Duration: 10 mins

Share - Pick a speaker at your table to share your findings.
What’s my take-away?

**COAA’s mission is to drive to safe, effective, timely and productive project execution**

Our opportunity is to use Digital Transformation to enhance

- ✓ Safety performance
- ✓ Workforce engagement
- ✓ Capital efficiency
Thank you